

Claims

526
B2
1. A microgel having a mean particle size of 0.1-1,000 μm , the microgel being produced from a gel which is formed by use of a hydrophilic ^{proteins (gelatin, collagen, agar, gellan gum)} compound capable of forming a gel.

2. A microgel having a mean particle size of 0.1-1,000 μm , the microgel being produced from a gel which is formed by use of a hydrophilic compound capable of forming a gel and a viscosity increasing compound incapable of forming a gel.

3. A microgel as described in claim 2, wherein the viscosity increasing compound incapable of forming a gel is one or more viscosity increasing compounds selected from the group consisting of xanthan gum, succinoglycan, polyacrylic acid, polyethylene glycol, polyacrylamide, and a polyalkylacrylamide/polyacrylamide copolymer.

4. A microgel as described in any one of claims 1 through 3, wherein the hydrophilic compound capable of forming a gel is one or more hydrophilic compounds selected from the group consisting of agar, carrageenan, curdlan, gelatin, gellan gum, and alginic acid.

5. A microgel as described in any one of claims 1 through 4, which has a viscosity of 2,000-1,000,000 $\text{mPa}\cdot\text{s}$ (B-type viscometer, 25°C).

6. A process for producing a microgel of claim 1, which process comprises dissolving in an aqueous solvent a hydrophilic compound capable of forming a gel; causing the resultant mixture to form a gel; and pulverizing the gel into

a microgel having a mean particle size of 0.1-1,000 μm .

7. A process for producing a microgel of claim 2, which process comprising dissolving in an aqueous solvent a hydrophilic compound capable of forming a gel and a viscosity increasing compound incapable of forming a gel; causing the resultant mixture to form a gel; and pulverizing the gel into a microgel having a mean particle size of 0.1-1,000 μm .

8. An external composition comprising a microgel of any one of claims 1 through 5.

9. An external composition as described in claim 8, further comprising a pharmaceutical ingredient and/or a salt.

10. An external composition as described in claim 9, wherein the pharmaceutical ingredient is a whitening ingredient.

11. An external composition as described in claim 10, wherein the whitening ingredient is one or more whitening ingredients selected from the group consisting of L-ascorbic acid, an L-ascorbic acid derivative, arbutin, glutathione, tranexamic acid, a tranexamic acid derivative, a placenta extract, and a vegetable extract exhibiting whitening effect.

12. An external composition as described in any one of claims 9 through 11, wherein the amount of the pharmaceutical ingredient and/or the salt is 0.01-20 mass% of the total of the composition.

13. An external composition as described in any one of claims 8 through 12, which is a cosmetic composition.

14. An external composition as described in any one of

[Handwritten signature]

[illegible]